



STATUS REPORT

Progress and Improvements

DPW BUREAU/OFFICE: Back River Wastewater Treatment Plant (Back River) Date: 1/13/2023

Parameters	Week ending 12/21/22	Week ending 12/28/22	Weekly Permit limit	Meeting Requirement
Total Suspended Solids (TSS)	<1 mg/l	2.3 mg/l	15 mg/l	Yes
Biochemical oxygen demand (BOD)	2.0 mg/l	3.9 mg/l	15 mg/l	Yes
Total phosphorus (TP)	0.14 mg/l	<0.10 mg/l	0.30 mg/l	Yes
Ammonia (NH3)	0.3 mg/l	.54 mg/l	N/A	N/A
E-coli	3 MPN/100 ml	7 MPN/100 ml	126 MPN/100 ml	Yes

MPN = Most Probable Number **N/A** = Not Applicable

NOTE: WEEKLY AMMONIA PERMIT IS SEASONAL FROM 5/1-10/31. THERE IS A MONTHLY PERMIT LIMIT OF 2.0MG/L DURING THE SUMMER SEASON AND 5.1MG/L THE REST OF THE YEAR.

Maintenance Updates

Maintenance staff continues to focus on the preventive maintenance (PM) of the process areas.

In-Ground Digester cleaning and repairs for #1 is complete. In-Ground digester #4 has completion in April 2023. The contract for rehabilitation of all remaining digesters, in ground and egg shaped, is being processed for award. Notice to proceed on that contract will be in the first quarter of 2023. The digestion process reduces the amount of biosolids requiring treatment prior to removal while improving methane production for the plant co-generation efforts which supply power to the plant facilities.

Primary Settling Tank (PST #7) was tested and was restored to full service December 23, 2022. The focus will then shift to repairs of PST #2 and #9, which will tentatively return to service by February 2023. Ulliman Schutte (USC), completed a temporary install of a bulkhead to isolate the effluent trough/laundry from the common effluent channel. USC also completed the removal, cleaning, and reinstall of the common effluent channel man guard that was saturated with debris and trash. This cleaning alleviated flow restrictions and lowered the water level in the PST effluent channel by 2 feet during normal flows.

Centrifuge #1 has been placed into service. Centrifuge #2 is having regular maintenance conducted at this time, leaving #1 and #3 in-service/available. Centrifuge #4 is awaiting delivery of a shaft and bowl which will then be installed and providing the City with four operational centrifuges. All repairs have been made to the Centrifuge flushing water system piping that was broken during sub-freezing temperatures last week and associated equipment restored to operation.

Workforce Development

The B'More WISE program started the first cohort of 11 participants on January 9, 2023. The Training program will run through June, 2023 when successful participants will be transitioned to apprenticeship positions at either a Water or Wastewater Treatment Plant. The participants will have two days a week of class room instruction and three days of follow through at one of the plants to gain field experience. The Department anticipates that successful participants will be able to matriculate into full time employees with a high level of skill as Water and Wastewater Operators.

Summary

DPW has made substantial progress toward full compliance at Back River. More specifically, suspended solids, biochemical oxygen demand, total phosphorus, ammonia, and total nitrogen have decreased significantly since March 2022. **All monthly parameters are currently under permit limits and Back River has maintained compliance since June.**

DPW recognizes that Back River is a valuable asset to the Baltimore region and we are excited about the path forward to sustained compliance.

Given the substantial progress made towards maintenance in compliance at our plants, DPW will move to release monthly reports in order to provide more robust updates. Our next report will be released on February 10, 2023.